

Figure A.2.2-2. ACS and LP Mooring Arrangement During Integrated Launch Vehicle Transfer

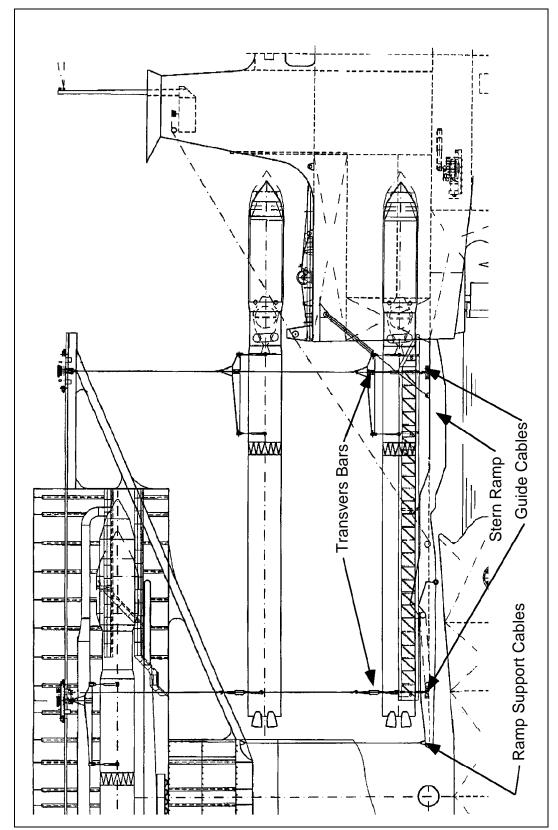


Figure A.2.2-3. Integrated Launch Vehicle Transfer Arrangement (1 of 2)

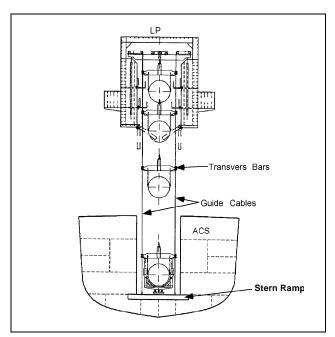


Figure A.2.2-3. Integrated Launch Vehicle Transfer Arrangement (2 of 2)

## A.2.3 Launch Platform

The LP will serve as the transport vessel for the integrated launch vehicle and also serve as the launch pad. It will also provide accommodations for the marine and prelaunch crews during transit to and from the launch location. It will have all the necessary systems for launch vehicle erection, fueling, and for the conduct of launch operations.

The LP (Figure A.2.3-1) is a modification of an existing semi-submersible oil platform. This platform was designed for continuous operations in the extreme environment of the North Sea. In the relatively benign environment at the Sea Launch locations, this design will provide an extremely stable platform from which to conduct launch operations. The LP will be self-propelled by diesel-electric motors and will ride catamaran style on a pair of large pontoons. Once at the launch location, the pontoons will be submerged by ballasting to achieve the stable launch position, level to within approximately one degree. The LP will have an overall length (at the pontoons) of approximately 133 m and the launch deck will be 78 m by 66.8 m. Its overall transit displacement will be approximately 27,400 metric tonnes. Once transferred to the LP in the Home Port, the integrated launch vehicle will ride to the launch location in the enclosed hangar on the main deck. After LP ballasting at the launch location, the rocket will be rolled out to the launch pad and erected in preparation for launch.

After the launch vehicle has been erected and all launch system checks are complete, the crew members will be transferred to the ACS. Vessel station keeping and launch operations will be conducted from the ACS via redundant RF links.